### CHAPTER 2A

### CLEARING AND GRUBBING

#### 2A-01. PRE-CONSTRUCTION ACTIONS

# a. Extent of Clearing. Grubbing, and Disposal Work

Check by a thorough review of the contract plans, specifications, and by reconnaissance of the area. Check permit restrictions and rights—of—way.

### b. Contractor\*s Schedule of Operations

Schedule of operations shall be obtained and studied.

#### c. Work Limits

- (1) Determine whether limits have been established in agreement with plans and specifications.
- (2) Ensure that area to be cleared and grubbed is clearly marked.
  - (3) Check the cut-off elevations.
  - (4) Check depth and size of roots to be removed.
- $\ensuremath{(5)}$  Assure that monuments, markers, special trees are properly protected.

# d. Acquisition of Land or Easements

- (1) Do not permit contractor to enter any land where easements have not been received or when satisfactory agreement to enter has not been made.
- (2) Determine from your supervisor that the rights-of-way are available for construction.

# e. Safety of Personnel and Equipment

- (1) Identify and post existing and potential hazards, including poison oak, poison ivy, and poison sumac.
- (2) Be sure that First Aid Stations are clearly marked and that signs are posted showing location of the station.
- (3) Check the contractor\*s accident prevention plan for each particular phase of operation before each phase begins.
- (4) Check personal protective equipment; hard hats, gloves, snake-proof leggings, etc.
- $\ensuremath{(5)}$  Inspect equipment for fire protection, guarding of moving parts and pinch points.

# f. Existing Power lines and Other Utilities

Note whether they are properly posted, protected, relocated, or removed as required.  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

#### g. Work Requirements

- (1) Know the requirements for the different areas.
- (2) Check the terrain, soil conditions and growth.
- (3) Assure that contractor has proper controls for erosion and drainage, noise and air pollution. Ensure that Environmental Protection Plan, if required, has been approved.

### 2A-02. CLEARING

# a. Swamping

- (1) Check removal of underbrush, vines, and small trees that will interfere with felling operations.
- $\mbox{(2)}$  Determine the number and spacing of workmen in the area engaged in hand clearing work (brush hook and axe operations) to insure safe working conditions.
- (3) Inspect the operation of equipment (power saws, dozers, etc.) for sufficient clearance.
- $\mbox{\ensuremath{(4)}}$  Check protective devices and warning signals of equipment and operators.
- $\mbox{(5)}$  Establish that the piling of swamped material does not interfere with felling and logging operations.

# b. Felling

- (1) Check tree-climbing equipment.
- $\mbox{(2)}$  Note any leaning trees, hollow trees, snags or lodged limbs that may cause trouble during felling operations.
  - (3) Mark and protect trees to be left standing.
  - (a) Check trimming of trees to be left standing.
- (b) Use approved tree wound paint on scars 1-1/2 inches in diameter and larger, caused by falling timber.
  - (c) If a tree surgeon is required, consult your supervisor.
  - (4) Ensure that felled trees are kept inside work limits.
  - (5) Check rig for topping.
- (6) Determine that workmen are kept properly positioned, within sight or hearing range during tree felling operations. Insist on overhead protection for bulldozer operators.
- (7) Check felling methods when such hazards exist as slopes, slippery terrain, rock, or outcrops.
  - (a) Check undercutting and wedging.
- (b) Inspect the condition of such equipment as axes, crosscut saws, power saws, dozers and winches.

- (c) Prevent damage to trees to be left standing , existing structures, and/or structures under construction.
  - Decking (Stacking)
  - (1) Identify marketable logs.
- (2) Inspect hand and power equipment used for bucking operations and the protective equipment required for operators.
- (3) Check stacking methods for pile locations, distribution of brush and logs in pile, compaction of pile, and type of decking. Locate piles above high water level.

### d. Logging

- (1) Check loading and hauling equipment.
- (2) Check protective devices and warning signals.
- (3) Check access and haul roads for bridge and road limits, clearances, steep grades and hairpin turns.
  - (4) Check dumping operations.

#### 2A-03. GRUBBING

- a. Observe removal depths of all stumps and matted roots.
- b. Determine maximum size of roots and other materials that may remain in the area.
  - c. Check method of measurement and payment.
  - d. Cut stumps to ground level in revetment areas.
- e. See that depressions from grubbing are properly filled and compacted.
  - f. Inspect operation of equipment.
- g. Insure that blasting procedures for stump removal are in accordance with approved methods listed in the Safety and Health Requirements Manual.
  - h. Check specified limits of grubbing areas.

#### 2A-04. DISPOSAL

Determine the disposal requirements and insist that the operation closely follows the clearing.  $\,$ 

- a. Check disposal of unsalvageable material. Debris must not enter waterways.
- b. Check piling and disposal equipment and procedure and the operators  $\!\!\!\!\!\!^*$  protective devices.
- c. Check arrangements made by the contractor for piling and storage of clearing debris on private lands.
- $\mbox{(1)}$  Check that the contractor has a signed letter from the owner acknowledging arrangements made. Get a copy for files.

### EP 415-1-261 2 Jan 92

- (2) Report to your supervisor any unwarranted entry by the contractor or unauthorized disposal of material on privately owned lands.
  - d. Locate debris areas above high water flow lines.
  - e. Observe location, number and size of piles.
- f. Check local fire district, county, state, Environmental Protection Agency, and US Forest Service Regulations prior to burning.
  - (1) Location and size of piles.
  - (2) Time of year burning is permitted.
  - (3) Standby equipment required.
- g. Assure that burning is not allowed in areas where it might cause damage to existing structures, construction in progress, trees, and other vegetation.
- $\ensuremath{\text{h.}}$  Check burning schedule for interference with other operations.
- i. Determine the kind and usage of fire kindling materials.
- j. Complete decking prior to the start of any burning operations.  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 
  - k. Do not permit burning in high winds.
  - 1. Require constant attendance of burning operations.
- $\ensuremath{\mathtt{m}}.$  Check suitability and safety of operations for periodic bunching of deck materials during burning.
- $\ensuremath{\text{n.}}$  . Ensure that fire fighting equipment and personnel are supplied by the contractor.
  - o. Ensure burning is complete. Reduce materials to ashes.
- $\,$  p. Provide that no burning is permitted on the surface of revetments, roads, or existing rock or gravel-type construction.

#### 2A-05. CLEAN-UP

Thoroughly check final cleanup.